

CLAIMS

- 1 1. A method for decomposing a multicast transaction into multicast messages directed to
2 targeted nodes of a distributed shared memory multiprocessor system, the multicast
3 transaction issued by a source node of the system to acquire data stored on a home node
4 of the system, the method comprising the steps of:
5 apportioning the multicast transaction into a predetermined number of multicast
6 packets at a global port of the home node;
7 forwarding the multicast packets to a central switch fabric interconnecting nodes;
8 generating the multicast messages from the packets at the central switch fabric,
9 the multicast messages generated according to multicast decomposition and ordering
10 rules; and
11 distributing the multicast messages to the targeted nodes.
- 1 2. The method of Claim 1 wherein:
2 the multicast messages include a commit signal (comsig) and one or more comsig
3 supporting messages, and
4 the comsig and the one or more comsig supporting messages are distributed last.
- 1 3. The method of Claim 1 wherein the step of generating the multicast messages com-
2 prises the step of generating the multicast messages associated with the source node and
3 the home node as a result of the last packet in the predetermined number of multicast
4 packets.
- 1 4. The method of Claim 1 wherein the multicast message associated with the source node
2 is a command response message and wherein the multicast message associated with the
3 home node is a comsig supporting message.